



UNITED STATES PATENT AND TRADEMARK OFFICE

U.S. APPLICATION NO.: US 10/600,359

FILING DATE: JUNE 23, 2003

APPLICANTS: RICHARD H. DAVIDSON,  
CRAIG D. HAGELIN and  
JOSEPH F. WATKINS, JR.

TITLE: FLAVOR ORDERING SYSTEM

CERTIFICATION OF  
RICHARD H. DAVIDSON  
CRAIG D. HAGELIN AND  
JOSEPH F. WATKINS, JR.

The undersigned being of full age certifies to the following:

1. The undersigned are the inventors of the subject application and are familiar with the pending patent application, as well as the Examiner's Office Action June 2, 2006.

2. The undersigned understand that the filing date of the new art of record relied upon by the Examiner in rejecting the subject claims is January 13, 2003 (the Birnbaum reference, Serial No. 10/341,154).

3. As set forth in detail hereinafter, Applicant conceived of its invention well before the filing date of the Birnbaum reference, coupled with due diligence from prior to said date to a subsequent reduction to practice and the filing of the application. As such, under R.131, the Examiner is respectfully requested to withdraw Birnbaum as a reference.

4. On March 24, 2000 at 9:00 a.m., Richard H. Davidson attended a meeting at Hagelin Flavors located at 200 Meister Avenue, Branchburg, New Jersey, of the entire flavor division comprising about fifteen Hagelin employees, in order to discuss a new concept proposed by the undersigned and to provide a status update regarding the "architecture" of the flavor database to be used in the unique flavor ordering system set forth in the subsequently filed Application. The discussion revolved about a system for the distribution of available flavors offered to an operator of the system, such as a customer, comprising computer work stations linked to a central processing hub; where the central processing hub included means for providing information regarding flavors, including a flavor search system through which a desired flavor may be identified; and where the flavor search system is associated with the central processing hub.

5. In short, the concept of putting together an accessible flavors database on computer for the purpose of searching the database for available flavors was discussed.

6. Initially an "Excel"-based program was considered, but this was very rudimentary. However,

conceptually, the searching of flavors by keyword by anyone in the Hagelin Company was discussed, as well as the necessity to develop computer program language in the context of an appropriate website; in short, a key word lexicon was discussed which would allow user input of keywords in order to facilitate the search of available flavors.

7. On or about June 16, 2000 at 2:00 p.m., Richard H. Davidson discussed with D.C. Helms, web hosting and website development in connection with the flavor ordering system. D.C. Helms would act as a consultant to the inventors to extend the rudimentary "Excel"-based program to a custom program accessible by customers in the context of a website.

8. In November or December of 2000, the undersigned had numerous discussions amongst themselves regarding use of descriptors, as well as flavor "legal status" keywords. The grouping set forth in currently amended Claim 1 of the Application was discussed during this period of time.

9. On or about September 15, 2000, there was another group meeting at Hagelin & Company, the Flavor Division, regarding a basic flavors tutorial and status update regarding the website and computer program development.

10. Between September 15, 2000 and September 21, 2001, the undersigned continued their development of the database of flavors. A proposal was received from D.C. Helms dated September 21, 2001, a copy of which is attached hereto as Exhibit "A". Ultimately, a contract was entered on November 9, 2002 with D.C. Helms, a copy of which is attached hereto as Exhibit "B" for website hosting and website development. D.C. Helms, based upon the technological input provided by the undersigned, was to design a website and his co-inventors, was to design a website and computer based program to facilitate the ready use of the flavor ordering system. Evidence of payments of D.C. Helms invoices is attached hereto as Exhibit "C".

11. In accordance with the contract, D.C. Helms developed a website/program computer, based upon our input.

12. In approximately February 2002, the undersigned performed a "beta" test in which a selected group of people were utilized as subjects in connection with the flavor ordering system and asked to evaluate same.

13. Following the "beta" test, we continued to develop the flavor ordering system and refined it into what is now known as the "Flavor Wizard".

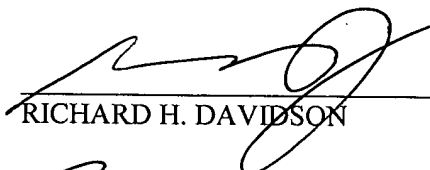
14. In June of 2002, we hired the firm of Herten, Burstein, Sheridan, Cevasco, Bottinelli, Litt & Harz, LLC, to evaluate our invention, to look into infringement of our trademark and our website by third parties and to begin drafting an application ultimately leading to a filing of an application with the United States Patent and Trademark Office. From June of 2002 until January 1, 2003 the undersigned continued to refine the invention and Arnold D. Litt was asked to evaluate potential infringement claims against third parties. Thereafter, we requested that a prior art search be undertaken. In February 2003, the prior art search was completed. Working closely with our attorneys, the firm of Welsh & Flaxman, which conducted the prior art search for us, as well as our patent draftsman, Robert Bush, various drafts of the patent application were generated, reviewed, revised and ultimately refined into a final form application which was filed in July, 2003.

15. Throughout this entire period of time we diligently continued to refine the invention, working very diligently with our professionals.

17. We believe that the above facts in character and weight establish a conception date of the invention well prior to the effective date of the Birnbaum reference, coupled with due diligence from prior to said date to a subsequent filing of the Application and reduction to practice of the system.

18. All statements made are true and all statements made on information and belief are believed to be true. The undersigned is aware of the fact that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the document and the registration.

Date: 12-7-06

  
RICHARD H. DAVIDSON

Date: 12-7-06

  
CRAIG D. HAGELIN

Date: 12-7-06

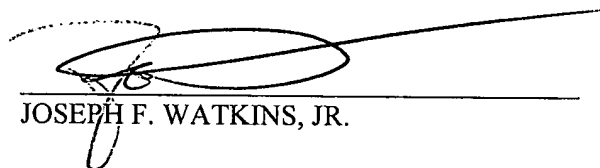
  
JOSEPH F. WATKINS, JR.

EXHIBIT "A"



- Web Site Design
- Web Hosting

- Internet E-Commerce
- Web Consulting

581 MEMORIAL PARKWAY / PHILLIPSBURG, NEW JERSEY 08855 / (908) 859-2000 / FAX: (908) 859-4414

September 21, 2001

Attn: Richard Davidson  
Hagelin & Company  
Phone: 908-707-4400  
Fax: 908-707-4408

Dear Mr. Davidson,

Upon reviewing our meeting notes the following is a cost estimate regarding the installation and set-up of a new server, also set-up and custom program database application. We estimate roughly two to three weeks from acceptance and deposit to having an initial prototype online, regardless of server status.

Hagelin server set-up and application software estimate: \$4,500.00

Note this price estimate does not include secure certificate or server hardware costs.

#### **Our recommendations and specifications:**

Initially, the Hagelin site will be very low load, and could be served with nearly any Pentium X-class workstation, provided the hardware is supported by the FreeBSD (or Linux, but preferably FreeBSD) operating system.

However, there are a few things to consider if opting to "save on the hardware" now and use a "recycled" PC or low-end hardware. The first issue is reliability. Your server will ultimately be replacing your current database of flavor types. Although this is a rather small, and very static database, what are the implications of a loss of data due to a hardware failure?

Another issue to consider is scalability. Although the current application is relatively small in scope, are there any longer-term plans for additional web enabled data management services? While purchasing low-end hardware may initially save some money, as systems grow larger and more complex it becomes more difficult to "move" an application onto new hardware than install more memory, another drive or another processor into a server which supports these capabilities.

Intel-based computer prices are very reasonable, and highly reliable and scalable rack-mount (or tower) servers are available from anywhere between \$1500 and \$15,000.

The fact that you have an existing in-house network presents more options when determining server configurations. Assuming the internal LAN uses IP networking and "non-routable" addresses, a very secure and reliable solution (which could offer nearly seamless backup and recovery) would be to run two servers which are essentially mirrored:

Run the database engine on one server, on only the internal network, and run the web server on both the non-routable internal network and the internet. This configuration provides the following advantages:

- During multi-server operation, the database can not be reached directly from the internet, only via the web application server.
- Timely backups of the database can be made and stored on either the web server or external media, which can be used by the web server in the event of a hardware failure on the database server.
- In the event that the internet web server fails, the database is intact on another machine which can be quickly configured to run the web server daemon.
- In the event that the database server fails, the web server can be quickly configured to start the database engine locally, using a recent backup.
- In the event that the web server is "hacked", only the application software would be "lost", not any sensitive data behind the application.

Whether you opt for a single or multi-server solution, any servers used should have multiple network cards. Since their database will be used both locally and via the internet, in the event of any lack of internet service, the cost of not being able to access the database will most likely far outweigh the \$100 spent on additional network card.

D.C. Helms Inc. only builds applications using software foundations (such as the Apache web server and MySQL Relational Database Management System) which are reliable, scalable and configurable to meet your current and future needs, so it makes sense to run your application on scalable hardware. Additionally, all internet based applications which use database backends are designed in such a way that they can quickly attach to a database on any external server which supports both the database and the connection request. This provides a nearly limitless array of data management, preliminary testing and recovery solutions.

#### **Hardware:**

- (1) PIII 1GHz Processor on dual or quad processor motherboard
- (1) 512MB PC133 SDRAM
- (2) Intel Pro 100 MB ethernet network cards
- (1) TNT2 AGP graphics adapter (8 - 32 Mb)
- (1) Adaptec AHA29160 SCSI Controller
- (2) 18GB 10,000 RPM ultra SCSI-160 drives
- (1) PS/2 Keyboard
- (1) PS/2 Mouse
- (1) Monitor... any

#### **Operating System:**

FreeBSD 4.3 (or current stable)

#### **Server Software:**

Apache 1.3.20 (or current stable) web server  
SSH (default on FreeBSD systems)  
PHP 4.0.6 (or current stable)

MySQL 3.23.41 (or current stable)  
PostgreSQL 7.1.3 (or current stable)  
Perl 5.6 interpreter  
GIMP 1.2.x (GNU Image Manipulation Program)  
gtk current stable  
gcc compiler

Please view the "Hardware" links from <http://www.freebsd.org>

Perhaps more specifically:

<http://www.apache.com>

<http://www.freebsdsystems.com>

<http://www.terasolutions.com> (TS5110)

Most of these companies also provide very reasonable (if not inclusive) service agreements for the servers they provide.

### **Application Requirements**

#### *Session, Security and User Management*

The Hagelin application will need a flexible and secure method of managing users which will be connecting to their application and database via the internet. Security can be achieved and managed at levels, including:

- Connection level security. Secure sockets, which allows encrypted data to be transferred over public networks and decrypted only by parties of the socket connection.
- Application level security. Session and security management, which assures that web content is not delivered to unauthorized parties, regardless of their connection type. Session Management is used to associate a users login name with a specific user-level, which in turn is checked prior to delivering content.
- Data File Security. Assuring that raw data files used by the database server can not be accessed directly via the internet.
- System Level Security. Assuring that the computer can not be accessed via any unnecessarily open ports (such as anonymous FTP, telnet, etc) A completely web-enabled method for system administrators to manage users of their servers, as well as a client/contact database.

#### *Searching Flavor Type Database*

The Hagelin application requires that registered users can search, select and request samples of their various flavors based on flavor type, legal status, product form (liquid or powder), etc.

Your application also requires that their users be able to view definitions and descriptions of each flavor type, in order to best define their sample selection.

The application will also require that there's a way for users to make a request for flavors that may not be apparent via their search strings; a web-based method of interacting with Hagelin if they can't find what they're looking for.

### **Gathering Session Data and Search Criteria For Order Preparation**

The Hagelin application requires that any successful search and match made by the user can be used to generate a pick ticket / shipping invoice. Since users are automatically associated with their respective client information upon logging into the system, associating session data with an order entry is necessary, and automatic.

- Users need to be able to select between a 1,2 or 4 oz. sample size.
- The application will also accept a required date for shipment/delivery.
- The Hagelin application also requires a method of assuring that users aren't "abusing their samples" privileges; a tracking system which manages how many samples are delivered per individual client.

### ***Maintaining Database***

The Hagelin application will require that there be a completely browser based application for input and maintenance of the database tables required by the application.

### ***Implementation and Deployment***

Hagelin requires that their application be ready for initial testing by mid/late November 2001, with "full-scale" deployment in early 2002. The interim period between November 2001 and January 2002 shall be used for fine-tuning and usability testing, based on feedback from clients and Hagelin personnel.

### **Network Requirements & Recommendations**

The single most important aspect of network service when delivering web-based applications (aside from the reliability!) is the absolute necessity for static IP addresses. Though DSL may appear to be a very cost-effective means to high speed network access, IP addresses are often dynamically set (which is absolutely unacceptable when running a web server!), and many DSL providers have clauses in their service agreements which limit (or completely preclude) the use of their service for the purpose of running a web server.

Additionally, while most DSL lines offer very respectable download speeds, their upload speeds are usually only a fraction of their download speeds... which is great for surfing the internet, but not so great for "serving" the internet.

#### **DSL should be used only if:**

- Your DSL service provider can provide you with static IP addresses;
- Your DSL service provider has no limitations on bandwidth usage or running web servers on your bandwidth;
- Your DSL service provider understands, appreciates and can service you even though you're NOT using a Mac or Win32 (95/98, Windows NT, Windows 2000) operating system. Just remind them that the internet was designed and built on Unix!



Initially, the Hagelin server will be very low load and could probably get by with 128K of network bandwidth. This should easily support up to 3 or 4 simultaneous connections with negligible impact on a client accessing the server via a dialup connection. Keep in mind that the connection "lifecycle" is typically quite short: a request to the web server is answered in a very short amount of time (often less than a second), then connection is idle (if waiting for the next HTTP/1.1 request), then the connection is closed. Most network latencies experienced by web users are between their PC and their internet service provider.

The most feasible long-term solution would be T1 service, if the intent is to run the servers in house. Though it's not as expensive as it was a few years ago, expect to spend at least a few hundred dollars a month for T1; plus the expense of installing and configuring a router. Internet Service Providers often offer "fractional" T1 service (less bandwidth for less money), and other options.

When compared to the cost of remote hosting (which often guarantees 100% network connectivity via multiple T3 or optical backbones and 99.98% server uptime), in-house hosting can prove to be an expensive hosting option. However, broadband service into the Hagelin facility can offer more than just a backplane for a web server; the same bandwidth can be used for high-speed network service for the entire in-house network.

Costs are based on the specifications above and any extra work will be billed accordingly. Please call if you need any clarifications or have further questions. 908-859-2000. Thank you.

Very truly yours

Clint Helms  
D.C. Helms Inc.  
www.dchelms.com  
clint@dchelms.com

EXHIBIT "B"

Keep in JT

### Contract for Web Site Hosting

The following agreement is by and between D. C. Helms, Inc. (DCH) at the following address 561 Memorial Pky, Phillipsburg, NJ 08865 and

Hagelin & Company Inc.

(Client) of

200 Meister Ave. Branchburg, NJ.

(Address)

WHEREAS, DCH is a Web Site Development, Hosting and Programming service connected to the Internet DCH offers Design, Hosting and Programming services over the Internet through access to its Web Server.

WHEREAS, Client seeks to utilize DCH's Deluxe server with 400 megabytes of space for its own purpose, Hosting Website, Flavortype Application Database, Pop Email Accounts, etc.

WHEREAS, the parties acknowledge that the Internet is neither owned nor controlled by any one entity; therefore, can make no guarantee that any given reader shall be able to access DCH's server at any given time. DCH represents that it shall make every good faith effort to ensure that its server is available as widely as possible and with as little service interruption as possible.

NOW THEREFORE, in consideration of the mutual promises contained herein, the parties agree as follows;

#### I. Financial Arrangements

1. Client agrees to a one (1) month contract, beginning upon DCH's receipt of 1/3 payment of estimated total cost of \$4649.00 this includes the first year payment of \$349.00 for the secure certificate each additional year is \$249.00. Then 1/3 payment upon completion of DCH's work and 1/3 payment after 30 days of testing. Client agrees to pay DCH for services rendered pursuant to the payment schedule above. See attached sheets for specifications and additional terms. DCH reserves the right to modify the rate schedule at any time of not more than 10% with 30 days notice and not more than a total of 20% in one years time.
2. First one (1) month payment (\$110.00) for hosting shall be due upon acceptance of contract.
3. The agreement will automatically renew for successive one (1) month period unless cancelled in writing prior to the monthly renewal date. Client will receive an invoice for charges and payment is due upon receipt.
4. Any payment late more than 30 days we have the right to terminate service after notification.

#### II. Taxes

DCH shall not be liable for any taxes or other fees to be paid in accordance with or related purchases made from Client or DCH's server. Client agrees to take full responsibility for all taxes and fees of any nature associated with such products sold.

#### III. Material and Products

1. Client will provide DCH with material and data in a condition that is "server-ready", which is in a form requiring no additional manipulation on the part of DCH, in the event that manipulation is required this will be changed accordingly. DCH shall make no effort to validate the information for content, correctness, or usability.

2. DCH will exercise no control whatsoever over the content of the information passing through the network. DCH makes no warranties or representations of any kind, whether expressed or implied for the service it is providing. DCH also disclaims any warranty of merchant-ability or fitness for particular purpose and will not be responsible for any damages that may be suffered by the Client, including loss of data resulting from delays, non-deliveries or service interruptions by any cause or errors or omissions of the Client. Use of any information obtained by way of DCH is at the Client's own risk and DCH specifically denies any responsibility for the accuracy or quality of information obtained through its services. DCH expressly limits its damages to the Client for any non-accessibility time or other down time to the prorated monthly charge during the system unavailability. DCH specifically denies any responsibilities for any damages arising as a consequence of such unavailability. In the event that this material is not "Server-ready", DCH agrees to notify Client immediately of its refusal of the material and afford Client the opportunity to amend or modify the material to satisfy the needs and/or requirements of DCH.

#### IV. Trademarks & Copyrights

Client warrants that it has the right to use the applicable trademarks, and or copyrights if any, and grants DCH the right to use such trademarks and copyrights in connection with DCH's Server service.

#### V. Hardware, Equipment & Software

The customer is responsible for and must provide all telephone, computer, hardware and software equipment and services necessary to access DCH. DCH makes no representations, warranties, or assurances that the Customer's equipment will be compatible with the DCH service.

#### VI. Termination

This Agreement may be terminated by either party, without cause, by giving the other party 30 days written notice. Notwithstanding the above, DCH may terminate service under this Agreement at any time, without penalty, if the Client fails to comply with the terms of this Agreement.

#### VII. Limited Liability

1. Client expressly agrees that use of DCH's Server is at Client's sole risk. Neither DCH, its employees, affiliates, agents, third party information providers, merchants licensors or the like, warrant that DCH's Server service will not be interrupted or error free; nor do they make any warranty as to the results that may be obtained from the use of the Server service or as to the accuracy, reliability or content of any information service or merchandise contained in or provided through the DCH Server service, unless otherwise expressly stated in this Agreement.
2. Under no circumstances, including negligence, shall DCH, its officers, agents or any one else involved in creating, hosting, producing or distributing DCH's Server service be liable for any direct, indirect, incidental, special or consequential damages that result from the use of or inability to use the DCH Server service; or that results from mistakes, omissions, interruptions, deletion of files, errors, defects, delays in operation, or transmission or any failure of performance, whether or not limited to acts of God, communication failure, theft, destruction or unauthorized access to DCH's records, programs or services. Client hereby acknowledges that this paragraph shall apply all content on DCH's Server service. DCH assures its clients that every effort will be taken to keep any confidential information confidential and secure.
3. Notwithstanding the above, Client's exclusive remedies for all damages, losses and causes of actions whether in contract, tort including negligence or otherwise, shall not exceed the aggregate dollar amount which Client paid during the term of this Agreement and any reasonable attorney's fee and court costs.

**VIII. Lawful Purpose**

Client may only use DCH's Server for lawful purpose. Transmission of any material in violation of any Federal, State or Local regulation is prohibited. This includes, but is not limited to copyrighted material, material legally judged to be threatening or obscene, or "ADULT", or material protected by trade secrets is prohibited and service can be terminated without notice. Use of DCH's facilities for bulk e-mail of any kind (spam or UCE) is discouraged and if complaints are registered must be immediately halted or service will be terminated without notice.

**IX. Indemnification**

Client agrees that it shall defend, indemnify, save and hold DCH harmless from any and all demands, liabilities, losses, costs and claims, including reasonable attorneys' fees, ("Liabilities") asserted against DCH, its agents, its customers, servants officers and employees; that may arise or result from any service provided or performed or agreed to be performed or any product sold by Client, its agents, employees or assigns. Client agrees to defend, indemnify and hold harmless DCH against Liabilities arising out of (i) any injury to person or property caused by any products sold or otherwise distributed in connection with DCH's Server (ii) any material supplied by Client infringing or allegedly infringing on the proprietary rights of a third party; (iii) copyright infringement and (iv) any defective product which Client sold on DCH Server.

This Agreement constitutes the entire understanding of the parties. Any changes or specifications thereto must be in writing and signed by both parties.

This Agreement shall be governed and constructed in accordance with the laws of the State of New Jersey.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the date indicated below.

Hagelin & Company Inc.

Client Name

Date

 President

Signature &amp; Title

Date

D.C. Helms, Inc.

Date

D. Clinton Helms President 11-9-01

Signature &amp; Title

Date

## SPECIFICATION SHEET

**PRODUCT:** *Nat Strawberry Rhubarb Flavor WONF # 671816*

**APPEARANCE:** *Clear light amber liquid*

**FLAVOR/AROMA:** *Characteristic strawberry rhubarb flavor & aroma*

**SPECIFIC GRAVITY @ 20° C:** *0.992 – 1.092 gm/ml*

**WEIGHT (lbs) /GALLON:** *8.69 lb/gal*

**REFRACTIVE INDEX @ 20° C:** *0.922 – 1.462*

**FLASH POINT:** *97 ° F (closed cup)*

**REGULATORY:** *All flavor ingredients contained in this product are approved for use in a regulation of the Food and Drug Administration and/or are listed on an industry standard list (FEMA/GRAS).*

**NON-FLAVORING INGREDIENTS:** *Propylene Glycol, Ethyl Alcohol, Partially Inverted Sugar Syrup, water*

**STORAGE:** *Store in tightly sealed container away from excessive heat or direct sunlight at ambient (~ 70° f) temperature.*

**STABILITY:** *6 months at above storage conditions.*

**Date:** *09-26-06*

Hagelin & Company, Inc. is unable to anticipate all conditions under which the above information and our products may be used. Customers are advised to perform their own tests to determine the safety and suitability of each product for their own purposes. Our recommendations and suggestions are made with no guarantee or warranty stated or implied, since conditions of use are beyond our control. We reserve the right to adjust or update this information, as new data becomes available.

Keep in JT

**Functional Specification for:  
Hagelin & Co. Flavortype Selection Database Application**

**Summary**

This document describes the proposed functional details of the Flavortype Selection Application. All design work for the Flavortype Application will conform with the criteria described in this document.

**Overview**

The Hagelin & Co. Flavortype Application will be an internet-based, database dependent application which allows Hagelin to manage a flavortype database. The Flavortype Application will allow Hagelin the ability to provide access to the Application via the internet, with limited permissions.

Data security is a primary concern of Hagelin, and all transactions between the Application users web browser and the internet database server will be conducted over a secure HTTP connection to avoid compromising proprietary data or Flavortype Application software.

The Hagelin Flavortype Application interface will require a web browser which is both a) capable of communicating over a secure HTTP connection; and b) able to accept and send cookies. Nearly all web browsers released in the past few years support these capabilities.

Certain Application administrative tasks may be performed via a secure shell (SSH) interface, which requires a secure telnet client.

All user and administrative interaction with the Hagelin Application will be conducted using secure HTTP protocols whenever sensitive data (such as user names and passwords) may be used to compromise application or proprietary data integrity.

There will be no aspects of the Hagelin Flavortype Application which place any platform or browser dependencies on Application administrators or users.

**Hosting -**

**Service:** Hagelin's Deluxe Server specifications:

400 Megabytes of Space, Unlimited Hits & Transfer, World Wide Web Server (www.hagelin.com), Administrator FTP Account, Administrator Telnet Account, Perl, PHP/FI, Database Support Including MySQL, mSQL, PostgreSQL, Java Based Graphical Interface, Access to your own passwd, aliases, httpd.conf, and other configuration files, Unlimited Email Aliases & Auto Responders, Unlimited POP Email Accounts, Unlimited Mailing Lists, Unlimited Password Protected FTP Accounts, Log Files & Configurable Statistics, cgi-bin Directory, Real Audio/Video Basic Server, Instructions for Installing Scripts Including Counters, Form Mail, Guest Books, Web Based Email, Instant Recovery from Online Backups, Unlimited Email Support, Virtual Hosting Support.

**Hardware:**

There will be no "hardware-dependent" (i.e., Intel x86, Alpha, Sparc) code within the Hagelin Flavortype Application.

**Platform:**

The Hagelin Flavortype Application will be built on an internet server which uses the FreeBSD operating system. FreeBSD is a freely available Berkley Unix derivative which is very highly regarded for stability, performance and security and is very widely used by internet service and webhosting providers worldwide.

Though the Hagelin Flavortype Application will not include any "platform-dependent" code which is specific to FreeBSD, the application does require a Unix (clone or derivative) operating platform, such as FreeBSD, Linux, Solaris, etc. All application final acceptance testing will be performed with the Flavortype Application running on a FreeBSD server.

More specifically, the Hagelin Flavortype Application WILL deploy certain core Unix architecture utilities (such as filemode and file permission utilities) which ARE NOT AVAILABLE on Microsoft platforms. The Hagelin Flavortype Application WILL NOT be tested or run ANY Microsoft platform, nor will its usage on Microsoft platforms be recommended, guaranteed or in any way supported by DC Helms Inc.

Further, the Hagelin Flavortype Application DOES require additional third-party software which is more widely used and tested on Unix platforms.

**Required Software:**

The Hagelin Flavortype Application will require additional third-party software. All required third party software will be provided and configured by D.C. Helms Inc. with respect to any data security concerns on behalf of Hagelin.

The Hagelin Flavortype Application requires:

- Apache Webserver w/ Secure Socket Layer capabilities
- PHP Interpreter installed as Apache Dynamically Shared Object
- Perl interpreter
- MySQL Relational Dababase Management System
- Unix shell (bash,ksh) for installation utilities.

**Application Design**

The Hagelin Flavortype Application will be written using the PHP (PHP Hypertext Preprocessor) programming language. PHP is a widely used server-side programming language which allows for dynamic web content generation while providing tight integration with a wide variety of databases.



PHP is in interpreted language, which means that PHP applications do not get compiled prior to runtime. In order for PHP code to execute, it must be passed through an interpreter. The Hagelin Flavortype Application will run the required PHP interpreter as a "shared object", which means that all Application code will run within the webserver process.

The Flavortype Application will essentially be a real-time reflection of data stored in various tables on a remote server. As a result of this design, there will be virtually no need for "static" HTML pages; instead server-side applications will dynamically generate the HTML which gets sent to the user's web browser.

The usage of PHP as the application programming language places absolutely no browser-specific requirements on Application usage or administration. All PHP application code is executed on the server, within the webserver process, and no application code or direct data access methods are executed on the user web browser. Since the Application will not require any client-side plug-ins or interpreters, usage will be compatible with a very wide array of web browsers, including Microsoft Internet Explorer (version 3 or later), Netscape Navigator (version 2 or later), Mozilla, Opera, as well as many commonly used web-enabled desktop environments used by newer Microsoft platforms, as well as the KDE and Gnome desktop environments, which are popular on many Unix platforms.

The Hagelin Flavortype Application will minimize the use of graphics in order to minimize network data transfer latencies while maintaining compatability with text-based web browsers (such as Lynx) and "graphically challenged" web enabled personal communications devices.

### Ownership

D.C. Helms Inc. agrees not to market this specific software application to any of Hagelin's competitors. Hagelin & Company retains all rights to the specific Flavortype Application software developed for Hagelin & Company by D.C. Helms Inc.

Both D.C. Helms Inc. and Hagelin & Company understand that the right of ownership includes the right to alter, modify, damage or destroy any data required by the Flavortype Application and/or the operating system, hosting environment or required third-party applications, resulting in changes which may make the Flavortype Application insecure, unstable or inoperable. D.C. Helms Inc. will NOT be held responsible or assume any liability for changes made in the Flavortype Application software, or any of its dependencies or configuration files, made by the owner(s), end user(s) or any other third party.

If Hagelin and Company require additional support to maintain or modify the Flavortype Application software, and/or its operating environment or dependent third-party applications after acceptance, the additional costs will be billed accordingly.

## Confidentiality

D.C. Helms Inc. agrees to keep all information regarding the development and application of this software confidential.

## Core Application Utilities

The Hagelin Flavortype Application will require certain core software components which are used in every instance of the Application.

## Session Management

By default, HTTP client-server communications are stateless. This means that there is no inherent method for a web server to know what unique user is accessing documents or data on the webserver. In order for the web server to "maintain state" between unique application users, the web server will use cookies to track unique and concurrent users. A cookie is piece of data which is (usually) set by the web server, and stored in memory (or on disk) on the client web browser. Each subsequent request from that client web browser to the server which set the cookie, will contain the cookie data. This exchange of data between web server and client browser is completely transparent to web clients who use browsers which support cookies.

The Session Management module used in the Hagelin Flavortype Application will use a randomly generated 8 - 32 character string, set as a cookie, to track unique users. The Session Management module will also be used to store data about each unique user, including the client IP address, web browser, the client user access level and id, and the client's ability to accept and send cookie data. As a security measure, the cookie set by the Session Management module will NOT be stored on disk on the client browser.

All communication between the web application server and web client browsers will require the Session Management module; each unique instance interaction between the web server and a specific client browser will be considered a session. All sessions are maintained on the server, and will be automatically deleted after a period of inactivity.

## Security

Every "page" used in the Hagelin Flavortype Application will have a required security value, which will be checked against the user level value associated with each unique session. This allows for minimal client-server communications overhead: each client user sends its unique session key to the server with the page request; all security checking and user level validation occurs on the webserver.

All communications between client and server will require database connection code which supports the ability to read and write session security data. The database connection code used by the Security and Session Management modules will be common to all users of the Hagelin Flavortype Application.

### **Flavortype Application**

A security model of this nature requires respect of the inherent file and process security on Unix platforms: i.e., the web server process runs as one system user, database connections are made by a single system user but offer a user management layer which is independent of the system to access raw data files, and the Hagelin application will use an additional User Management model which is independent of both the system and the database engine. By implementing this multi-tiered security model, a much greater degree of security is offered, since a username and password combination required by the Application does NOT offer access to the system (via telnet, rlogin, secure shell, ftp, etc), nor does it allow users to connect directly to the database engine with their username and password from a remote server.

### **Common Interface Application Utilities**

#### **Login and User Management**

All users and administrators of the Hagelin Flavortype Application will have unique user login names and passwords. All login transactions will be conducted using secure HTTP protocols. The user names and passwords used by the Hagelin Flavortype Application will NOT be "system level" or "shell access level" accounts on the server; that is Application users and administrators will NOT be able to login to the server via other TCP/IP protocols (such as telnet, secure shell, FTP, mail, etc) with their Flavortype Application username and password. This is a fairly obvious (but very important) component of the security model which the Hagelin Application will use: Application users are NOT system users!

All user names and passwords will be stored in a database table on the webserver, which is accessible by all users to select and update user data. All user passwords will be encrypted prior to being stored on the server. Another (not so obvious, but equally important) component of the security model which will be used the Hagelin Application: Application users are NOT database users!

Every Flavortype Application user will have an assigned user level, which will be an integer value between 0 (zero) and 9 (nine). User level values are incremental in nature, with level 9 granting full access to all data used by all modules within the Hagelin Flavortype Application, and user level 0 granting no access to any data (except session data, which uses a database connection connection which is entirely user independent).

All Flavortype Application users will be associated with either the Hagelin Company, or one of its client companies.

**The login process shall consist of the following steps:**

- 1) Initialize a unique session between the web server and client.
- 2) Return an Application Login Form to the client browser via a secure HTTP socket.
- 3) Return the completed login form (Application user name and user password) to the server via a secure HTTP connection.
- 4) If the user name and password provided by the client are valid, the session table is updated with the users unique id and user access level. The user table on the server will be updated to reflect the users new last login time, and the HTTP request will be redirected to a page reflecting options available to users of that access level. If the supplied username and password are not valid, OR the user level associated with the user are insufficient to perform the requested action, the Application Login Form will be returned to the user and after three unsuccessful attempts will be terminated with a notification to the User and Hagelin.

Once a user has successfully logged into the Flavortype Application, all subsequent requests from that user will be sent to the server with the clients unique session cookie identifier, which will be used to associate the permissions of that client against the required permission of the requested page. This allows for communication between server and client which does not require that a username and password be sent with each request, just the cookie data which identifies the users unique session.

**Hagelin Administrative Utilities**

The Hagelin Flavortype Application will provide Hagelin employees and Application administrators with all necessary utilities to add, view, edit and delete Application Data. This data shall include:

Flavortype Information Data  
Flavortype Description Definitions  
End Use Categories  
Client Sample Request Data  
Client Address and Shipping Data  
Flavortype Application User Data  
Special Instructions

DCI/RHD

Determination of administrative access will rely on a user access level, which (as described above) is an integer value between zero and nine. As users are added to the system, each user will be associated with either Hagelin and Company, or a Hagelin client. Each user will also be assigned an access level. In turn, different user access levels can be used to alter the following properties of a session:

- the type of connection used by the Application to communicate with the database. For example, a user logging into the Flavortype Application as an employee of Hagelin will (usually!) have a greater access level than that of any of Hagelin's client users. Therefore, the connection to the

database used when a Hagelin employee user logs into the system will provide support for a greater degree of functions.

- the available options (links, buttons, etc) displayed on the client browser interface.

Though the actual process of the Flavortype Application establishing a connection to the database is completely transparent to Application users, using this method assures that unauthorized users will not be able to modify data that they don't own by not providing them clickable links or buttons associated with prohibited use, but the connection that their application instance makes with the database will not support altering or deleting data.

By implementing ten distinct user levels, a great deal of flexibility can be utilized by Application administrators.

Additionally, a Hagelin Application administrator should be able to access the web database server to perform any necessary administrative duties. Though the Flavortype Application won't require that an administrator be able to operate through a secure telnet session, each administrator should have the capability of being able to access the server with a system-level user account.

### **Hagelin & Company Utilities**

The Hagelin Flavortype Application will allow Hagelin employees access to the Application to perform the following activities:

- View, process and update Sample Order Request Data;
- View, update, insert and delete data from the Flavortype Information and Description tables;

### **Hagelin Client Access Utilities**

The Hagelin Flavortype Application will provide an internet portal for Hagelin clients to perform the following actions:

- Search database Flavortype Information and Description tables;
- Select a Flavortype and construct a sample request order based on either the result of a Description - Definition keyword search, and/or from a list of distinct flavor types;
- Establish a means of relaying the result of a failed search or flavor-type selection to Hagelin personnel in the event that they can't locate what they're looking for. The program will generate a Sample Request Order notification with the user information.

In the event that the user flavortype search is successful, the user will be able to create a sample order request online. That sample request will be used by Hagelin employees to generate a pick ticket (shipping invoice) used to fulfill the sample order request.

The application estimate provided previously does NOT include the functionality to conduct full "online ordering" or "paid" transactions. If this is a possibility for the future, we'd sure like to know NOW, so that any current application design is done in such a manner so that it won't interfere or preclude future potential. This does not affect cost.

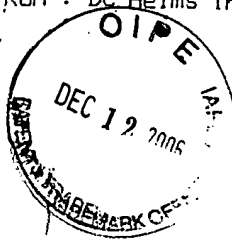
**Sample Order Request information shall include:**

- The real and Application name of the user making the sample request;
  - A solubility selection (water or oil);
  - Kosher requirements (if applicable);
  - The requested sample format (liquid or powder);
  - The shipping address associated with the client;
  - Required delivery date;
  - Sample size (1,2,4 oz);
  - The selected flavor type;
  - The description (key words) and definitions of the flavortype;
- \*This information is included in the order detail form.

**Documentation**

D. C. Helms Inc. will provide Hagelin and Company with any documentation required to use and administer the Flavortype Application software in an online format. Any additional documentation (online or printed) regarding the application operating environment or required third-party application software can be purchased seperately, or acquired via a variety of online sources.

**EXHIBIT "C"**



AN ARTIFICIAL WATERMARK IS PRESENT ON THE REVERSE SIDE

**HAGELIN & COMPANY, INC.**  
200 MEISTER AVE., BRANCHBURG, NJ 08876-6033

**SUMMIT BANK**  
EAST HANOVER, NJ #24  
55-216  
212

**063455**

CHECK NO. **063455**

DATE **11/09/01**

AMOUNT **\$1,660.00**

ONE THOUSAND SIX HUNDRED SIXTY AND NO/100 DOLLARS

PAY TO THE ORDER OF  
**D.C. HELMS INC.**  
**561 MEMORIAL PARKWAY**  
**PHILLIPSBURG, NJ 08865**

AUTHORIZED SIGNATURE *[Signature]*

DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER

⑈063455⑈ ⑆021202162⑆ 124001438 0⑈

110.00 was for  
Hastley 11/14/03



DC Helms Inc  
561 Memorial Pkwy  
Phillipsburg, NJ 08865  
908-859-2000



## INVOICE

INVOICE NUMBER: 4462

INVOICE DATE: November 9, 2001

PAGE:

## SOLD TO:

Hagelin & Company Inc.  
200 Meister Avenue  
Branchburg, NJ 08876

CUSTOMER ID		CUSTOMER PO		PAYMENT TERMS	
Hag01				Upon Receipt	
SALES REP ID		SHIPPING METHOD		SHIP DATE	DUE DATE
					11/9/01
QUANTITY	ITEM NUMBER	DESCRIPTION		UNIT PRICE	EXTENSION
1.	26	Website 1/3 deposit 5748-4918 per contract			1550.00
Subtotal					1550.00
Sales Tax					0.00
Total Invoice Amount					\$1550.00
Payment Received					0.00
Total Due					\$1550.00
Check No.					

DC Helms Inc  
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CUSTOMER ID	CUSTOMER PO	PAYMENT TERMS	
Hag01		Net 30 days	
SALES REP ID	SHIPPING METHOD	SHIP DATE	DUE DATE
			12/9/01

QUANTITY	ITEM NUMBER	DESCRIPTION	UNIT PRICE	EXTENSION
1.	72	Hosting for Website 1 month 2201-4919 11/12/01 - 12/12/01		110.00

Subtotal	110.00
Sales Tax	0.00
Total Invoice Amount	\$110.00
Payment Received	0.00
Total Due	\$110.00

Check No.

D.C. Helms, Inc.  
561 Memorial Pkwy  
Phillipsburg, NJ 08865

4512

Voice: (908) 859-2000  
Fax: (908) 859-4414

12/18/01

1

Hagelin & Co Inc  
Accounts Payable  
200 Meister Ave  
North Branch, NJ 08876

Ship To:

Hag01

Rich Davidson

Upon Receipt  
~~Net 30 Days~~

12/17/01

1/17/02

1.00 26

Database application  
testing phase/ This is 2nd  
payment of 3 6734-4918b

1,549.50

1,549.50

Subtotal

1,549.50

Sales Tax

Total Invoice Amount

\$1,549.50

Payment Received

0.00

Check No:

TOTAL DUE

\$1,549.50

Invoices not paid within 30 days of invoice date are subject to a finance charge of 1.5% per month which is an annual percentage of 18% charged on all past due accounts. There is a \$30.00 charge for all returned checks.

FROM : DC Helms Inc.

FAX NO. : 9088594414

Aug. 25 2006 03:29PM P17

D.C. Helms, Inc.  
561 Memorial Pkwy  
Phillipsburg, NJ 08865

4645

Voice: (908) 859-2000  
Fax: (908) 859-4414

3/13/02

1

Ship To:

Hagelin & Co Inc  
Accounts Payable  
200 Meister Ave  
North Branch, NJ 08876

Hag01

Rich Davidson

Net 30 Days

3/12/02

4/12/02

1.00 74

Database Application 1/3  
payment of 3 6734-4918c  
extra modification  
& cahnges 6734-6958

1,549.50

1,549.50

1.00 74

675.00

675.00

Subtotal 2,224.50

Sales Tax

Total Invoice Amount \$2,224.50

Payment Received 0.00

Check No:

TOTAL DUE \$2,224.50

Invoices not paid within 30 days of invoice date are subject to a finance charge of 1.5% per month which is an annual percentage of 18% charged on all past due accounts. There is a \$20.00 charge for all returned checks.



UNITED STATES PATENT AND TRADEMARK OFFICE

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**U.S. APPLICATION NO.: US 10/600,359**

**FILING DATE: JUNE 23, 2003**

**APPLICANTS: RICHARD H. DAVIDSON,  
CRAIG D. HAGELIN and  
JOSEPH F. WATKINS, JR.**

**TITLE: FLAVOR ORDERING SYSTEM**

---

**CERTIFICATION OF  
ARNOLD D. LITT  
PURSUANT TO R. 131**

The undersigned being of full age certifies to the following:

1. He is a member of the firm of Herten, Burstein, Sheridan, Cevasco, Bottinelli, Litt & Harz, LLC, and is familiar with the pending patent application identified above, as well as the prosecution history thereof.

2. Consistent with the Certification of Richard H. Davidson, dated November 9, 2006, in June 2002 my firm was retained by the applicants to evaluate their invention, to cause a prior art search respecting same to be conducted, reviewed and analyzed and to begin drafting a patent application should the patent search be clear. In addition, we were asked to evaluate third-party infringement claims.

3. From June 2002 until February 2003, we analyzed possible third-party infringement claims. We were told by the client they were continuing to refine the invention.

4. In February 2003, we ordered a prior art search from Welsh & Flaxman and upon receipt of the search analyzed each of the references uncovered. These references were disclosed in a Information Disclosure Citation which was ultimately considered by the examiner. Our recommendation to the client was to go forward with the drafting and filing of a patent application.

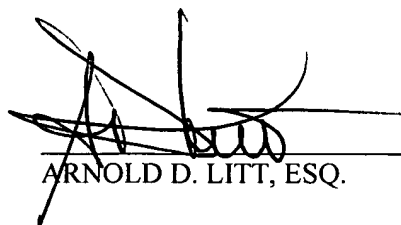
5. With our clients' consent, we retained a patent draftsman, Robert Busch, who drafted numerous drawings of the invention. These drawings were reviewed and revised a number of times based upon our clients' input. We also retained the firm of Welsh & Flaxman to coordinate with us in the preparation and filing of the application.

6. Numerous drafts of the application were prepared and were reviewed at length by our client, by our draftsman and by Welsh & Flaxman. Given the volume of drawings integrated into the application, the process was painstaking but thorough.

7. At all times the client worked with our firm diligently and in good faith to provide us with the necessary information required to go forward with the drafting and filing of the patent application.

8. All statements made are true and all statements made on information and belief are believed to be true. The undersigned is aware of the fact that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the document and the registration.

Dated: 12 / 8 / 06

  
ARNOLD D. LITT, ESQ.



UNITED STATES PATENT AND TRADEMARK OFFICE

U.S. APPLICATION : US 10/600,359

FILING DATE: JUNE 23, 2003

APPLICANTS: RICHARD H. DAVIDSON,  
CRAIG D. HAGELIN and  
JOSEPH F. WATKINS, JR.

TITLE: FLAVOR ORDERING SYSTEM

CERTIFICATION OF  
ANITA F. WILLIAMS

The undersigned being of full age certifies to the following:

1. I am the legal assistant of Arnold D. Litt.
2. Attached hereto is a complete filing of the documents that were submitted by express mail on December 11, 2006. These documents include the following:
  - a) Response to Office Action dated November 17, 2006
  - b) Certification of Richard H. Davidson, Craig D. Hagelin and Joseph. F, Watkins, Jr.
  - c) Certification of Arnold D. Litt, Esq.
  - d) Copy of Express Mail Receipt; and
  - e) Copy of self-addressed, stamped postcard used to establish receipt by the Patent Office of the indicated documents.

5. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that the statements were made with the knowledge that willful false statements and the like so made are

punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the Application or any registration issued thereon.

Dated: 12/11/06

Anita F. Williams  
ANITA F. WILLIAMS



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